

SANDVIK STEEL CO -- SANDVIK -- 3439-00-460-7667

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Product Identification  
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Product ID:SANDVIK  
MSDS Date:04/01/1991  
FSC:3439  
NIIN:00-460-7667  
MSDS Number: CDPXR  
=== Responsible Party ===  
Company Name:SANDVIK STEEL CO  
Box:1220  
City:SCRANTON  
State:PA  
ZIP:18501-1220  
Country:US  
Info Phone Num:717-587-5191  
Emergency Phone Num:717-587-5191  
CAGE:1BT93

==== Contractor Identification ====

Company Name  
:SANDVIK STEEL CO.  
Box:1220  
City:SCRANTON  
State:PA  
ZIP:18501-1220  
Country:US  
Phone:717-587-5191  
CAGE:1BT93

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Composition/Information on Ingredients  
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Ingred Name:CALCIUM CARBONATE; (CACO\*2)  
CAS:1317-65-3  
RTECS #:EV9580000  
Fraction by Wt: 1-10%  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST

Ingred Name:CALCIUM FLUORIDE; (CAF\*2)  
CAS:7789-75-5  
RTECS #:EW1760000  
Fraction by Wt: 1-10%  
OSHA PEL:2.5 MG/M3 (F) (MFR)  
ACGIH TLV:2.5 MG/M3 (F) (MFR)

Ingred Name:CHROMIUM; (CR)

(SARA 313) (CERCLA)  
CAS:7440-47-3  
RTECS #:GB4200000  
Fraction by Wt: 5-30%  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:COPPER; (CU) (SARA 313) (CERCLA)  
CAS:7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 0-4%  
OSHA PEL:0.1MG/M3 FUME;1 DUST  
ACGIH TLV:0.2 MG/M3 FUME  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:IRON; (FE)  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: BALANCE  
OSHA PEL:10 MG/M3 (MFR)  
ACGIH TLV:5 MG/M3 (MFR)

Ingred Name:MANGANESE; (MN) (SARA 313)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 1-10%  
OSHA PEL:5 MG/M3 DUST, C  
ACGIH TLV:5 MG/M3 DUST

Ingred Name:MOLYBDENUM; (MO)  
CAS:7439-98-7  
RTECS #:QA4680000  
Fraction by Wt: 1-10%  
OSHA PEL:10 PPM  
ACGIH TLV:10 PPM

Ingred Name:NICKEL; (NI) (SARA 313) (CERCLA)  
CAS:7440-02-0  
RTECS #:QR5950000  
Fraction by Wt: 1-35%  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3

Ingred Name:NIOBIUM; (NB) (ALSO CALLED COLUMBIUM)  
CAS:7440-03-1  
RTECS #:QT9900000  
Fraction by Wt: 1-10%  
OSHA PEL:N/K  
ACGIH TLV:N/K

ingred Name:POTASSIUM; (POTASSIUM (K))

CAS:7440-09-7

RTECS #:TS6460000

Fraction by Wt: 1-10%

OSHA PEL:N/K

ACGIH TLV:N/K

ingred Name:SODIUM; (NA) (CERCLA)

CAS:7440-23-5

RTECS #:VY0686000

Fraction by Wt: 1-10%

OSHA PEL:N/K

ACGIH TLV:N/K

ingred Name:SILICON; (SI)

CAS:7440-21-3

RTECS #:VW0400000

Fraction by Wt: 1-10%

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST

ingred Name:SODIUM FLUOALUMINATE; (SODIUM ALUMINUM FLUORIDE  
( $\text{NA}^3\text{ALF}^2$ ))

CAS:15096-52-3

RTECS #:WA9625000

Fraction by Wt: 1-10

%

OSHA PEL:2.5 MG/M3 (F) (MFR)

ACGIH TLV:2.5 MG/M3 (F) (MFR)

ingred Name:TITANIUM OXIDE; (TITANIUM DIOXIDE ( $\text{TIO}^2$ ))

CAS:13463-67-7

RTECS #:XR2275000

Fraction by Wt: 1-20%

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST

ingred Name:SUPP DATA:GOGGLES, IF NECESSARY, TO SHIELD OTHERS.

RTECS #:9999999ZZ

ingred Name:OTHER PROT EQUIP:SPKS & ELEC SHOCK. SEE ANSI Z49.1. THIS  
MAY INCL ARM PROTECTORS, APRONS, HATS, SHOULDER PROT & (ING 17)

RTECS #:9999999ZZ

ingred Name:ING 16:DARK SUBSTANTIAL CLOT

HING.  
RTECS #:9999999ZZ

Ingred Name:HAZ DECOMP PROD:COATING, ETC, & FUMES & GASES (CARBON DIOXIDE, CARBON MONOXIDE, DINITROGEN TETROXIDE, HYDROGEN (ING 19)  
RTECS #:9999999ZZ

Ingred Name:ING 18:FLUORIDE, NITRIC OXIDE, NITROGEN DIOXIDE, OZONE, PHOSGENE & PHOSPHINE). FOR MORE SPECIFIC INFO, CONT NEHC .  
RTECS #:9999999ZZ

Ingred Name:EFTS OF OVEREXP:TO BE POTNTL CARCIN IN IARC MONOGRAPHS & LISTED BY OSHA/ACGIH AS POTNTL CARCIN (MFR).  
RTECS #:9999999ZZ

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entification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:WELDING CONSUMABLES APPLIC TO THIS MSDS AS SHIPPED ARE NON REACTIVE, NON FLAMM, NON EXPLO & ESSNTLY NON HAZ UNTIL WELDED. ELEC ARC WELDING MAY CREATE ONE/MORE OF FOLLOWING HLTH HAZS: FUMES & GASES CAN BE DANGEROUS TO YOUR HLTH. ACUTE:OVEREXP TO WELDIN

G FUMES MAY RSLT IN DISCOMFORT SUCH AS DIZZ, NAUS OR(EFTS OF OVEREXP)

Explanation of Carcinogenicity:NICKEL:IARC MONOGRAPHS ON EVAL OF CARCIN RISK OF CHEMS TO MAN, VOL 49, PG 257, 1990:GRP 2B. NTP 7TH ANNUAL RPT (SUPDAT)

Effects of Overexposure:HLTH HAZ:DRYNESS/IRRIT OF NOSE, THROAT/EYES. CHRONIC:OVEREXP TO WELDING FUMES CAN LEAD TO SIDEROSIS (IRON PRODS IN LUNGS), CNS DMG, SENSIT DERM & BELIEVED BY SOME INVESTIGATORS TO AFFECT PULM FUNC. AR C RAYS CAN INJURE EYES & BURN SKIN. ELEC SHOCK CAN KILL. CHROMIUM IS LISTED IN NTP ANNUAL RPT ON CARCINS & FOUND(ING 20)

Medical Cond Aggravated by Exposure:AGGRAVATION OF RESPIRATORY OR ALLERGIC CONDITIONS MAY AFFECT SOME EXPOSED INDIVIDUALS.

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First Aid Measures =====

First Aid:REMOVE FROM EXPOSURE & CALL FOR MEDICAL AID. EMPLOY FIRST AID TECHNIQUE RECOMMENDED BY THE AMERICAN RED CROSS. INGEST:CALL MD IMMEDIATELY . INHAL:REMOVE TO FRESH AIR. SUPPORT BREATHING

(GIVE

O\*2 /ARTF RESP) . EYES:IMMEDIATELY FLUSH W/POTABLE WATER FOR A MINIMUM OF 15 MINUTES, SEEK ASSISTANCE FROM MD . SKIN:FLUSH W/COPIOUS AMOUNTS OF WATER. CALL MD .

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Fire Fighting Measures  
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Flash Point:NONFLAMMABLE

Extinguishing Media:MEDIA SUITABLE FOR SURROUNDING FIRE .

Fire Fighting Procedures:USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT .

Unusual Fire/Explosion Hazard:WELDING ARC & SPARKS CAN IGNITE COMBUSTIBLES & FLA

MMABLES. REFER TO ANSI Z49.1 FOR FIRE PREVENTION DURING USE OF WELDING & ALLIED PROCEDURES.

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Accidental Release Measures  
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Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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Handling and Storage  
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Handling and Storage Precautions:TRAIN EACH WELDER TO KEEP HIS/HER HEAD OUT OF FUMES. TRAIN EACH WELDER NOT TO TOUCH LIVE ELEC PARTS & TO INSULATE HIS/PER PERSON FROM WORK & GROUND.

Other Precautions:READ

& UNDERSTAND MFR'S INSTRUCTIONS & PRECAUTIONARY

LBL ON PROD. SEE ANSI Z49.1, SAFETY IN WELDING & CUTTING, PUBLISHED BY AWS, P.O. BOX 351040, MIAMI, FL 33195 & OSHA PUBLICATION 2206 (29 CFR 1910), U.S. GOVT PRINTING OFFICE, (SUPP DATA)

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Exposure Controls/Personal Protection  
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Respiratory Protection:USE NIOSH APPROVED RESPIRABLE FUME RESPIRATOR OR AIR-SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV/PEL.

Ventilation:USE ENOUGH VENT, LOCAL EXHST AT THE ARC, OR BOTH, TO KEEP FUMES & GASES BELOW TLV/PEL IN WORKER'S BRTHG ZONE & GEN AREA.

Protective Gloves:WELDER'S GLOVES.

Eye Protection:ANSI APPRVD CHEM WORKERS GOGGS &(SUPDAT)

Other Protective Equipment:ANSI APPRVD EYE WASH FOUNTAIN & DELUGE SHOWER. WEAR HEAD, HAND & BODY PROT TO HELP PVNT INJURY FROM RADIA,(ING 16)

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

EXPLAN

OF CARCIN:ON CARCINS, 1994:ANTIC TO BE CARCIN. ANIMAL:LUNGS,  
NASAL CAVITIES. OTHER PREC:WASHINGTON, D.C. 20402, FOR MORE  
DETAILS. EYE PROT:FULL LGTH FCSHLD . WEAR HELMET/USE FCSLD W/FILTE  
R LENS. LENS FILTER SHOULD BE AS DARK AS POSS W/OUT OBSTRUCTING  
VIEW OF WELD ZONE. PROVIDE PROT SCREENS & FLASH (ING 15)

===== Physical/Chemical Properties =====

HCC:T6

Appearance and Odor:SOLID CORE AND A FLUX COATING.

===== Stability and Reactivity

Data =====

Stability Indicator/Materials to Avoid:YES  
NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:WELDING FUMES & GASES CANNOT BE  
CLASSIFIED SIMPLY. DECOMP PRODS INCL OXIDATION OF INGS FROM BASE  
METAL & (ING 18)

===== Disposal Considerations =====

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING  
ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE,  
DISPOSABLE CONTAINER OR  
LINER IN AN ENVIRONMENTALLY ACCEPTED MANNER, IN FULL COMPLIANCE  
W/FEDERAL, STATE & LOCAL REGULATIONS.

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